

REMARKS

In response to the notice of non-compliance, claim 25 has been amended to include that the openings in the applicator extend in the longitudinal direction of the core, and to remove the reference to the applicator as being at the top of the core, though the fact that an applicator is so located does not mean the applicator must be a "rotor".

Note that original generic claim 1 allowed "an applicator unit in direct connection with the core, said applicator supplying the inner layer" of further material, and original claim 3 merely indicated that the supply openings would extend in the longitudinal direction of the core. In neither claim does it require that the openings extend along the entire longitudinal expanse of the core, only that whatever openings are provided do extend in the longitudinal direction of the core. Original claim 4 related to a specific structure, a "rotor" which is not included in new claim 25, and so reference to that claim by the Examiner is incorrect. In view of the above, claim 25 is believed to be within the elected species.

For convenience, the balance of the remarks from the prior preliminary amendment are repeated here.

Reconsideration and removal of the rejections are respectfully requested. Claims 9-24 were in the application, claims 9-15, 19 and 20 were previously withdrawn, claims 16-18 and 21-24 have been cancelled and new claims 25-30 substituted therefore.

Withdrawn claims 19 and 20 have been amended to depend from new claim 25 so as to be in proper condition for rejoinder should claim 25 be considered allowable.

Claim 25 replaces claim 16 and also includes substantially the limitations related to the embodiments described in paragraphs 0048-0050. In addition,

claim 25 has been drafted so as to clarify the inventive steps.

In particular, the claimed method involves delivering a further material through an applicator associated with a core, as the applicator moves upwardly through the outer mould part, best illustrated in Figs. 4-6.

Rotating the core during application of the further material forms the liner for the concrete pipe which has a greater density surface, and so improved corrosion resistance, better flow properties and a more attractive surface structure. [para 0015] Also, claim 16 confirms that the inner layer can be provided on part or all or the inner surface of the concrete as described in para 0053. No new matter is involved in these amendments.

As to the information disclosure statement, the Danish search report was cited for showing that the German Patent was considered an "A" background reference. It is not itself a reference and further description is unnecessary. (See MPEP609.04(a)III: "Where the information listed is not in the English language, but was cited in a search report or other action by a foreign patent office in a counterpart foreign application, the requirement for a concise explanation of relevance can be satisfied by submitting an English-language version of the search report or action which indicates the degree of relevance found by the foreign office. This may be an explanation of which portion of the reference is particularly relevant, to which claims it applies, or merely an "X", "Y", or "A" indication on a search report.")

Claims 16-18 and 24 were rejected as being unpatentable over Kern, U.S. Patent no. 5,051,223 in view of Steiro, U.S. Patent no. 4,039,642.

Kern was cited as describing the application of an impregnated layer, using pressure to penetrate into the surface for about 10 mm. Note that this impregnation is of a resin which infiltrates the concrete, that is, it is not a material that can provide an inner layer having a greater density structural surface, instead, this is a material which is diffused by pressure into the concrete.

On the other hand, the applicants invention forms a layer of greater density material, with this being applied during or immediately following vibration of the concrete, as the concrete is filling the space through the applicator, with the vibration maintaining the concrete in a fluid phase. In essence, the concrete being fluid is displaced, allowing intrusion by and formation of a liner which has a greater density structure.

Kerns teaches the opposite, only applying a liquid under pressure after the concrete has been compacted and is in essence a rigid solid structure. While it may be sufficiently soft to allow some pressure diffusion into the concrete, by only 10 mm, the concrete must be sufficiently rigid to prevent the pressurized fluid from creating pockets or holes which would be detrimental to the concrete pipe.

The applicants' invention teaches applying the further material very nearly simultaneously with the concrete, with the concrete still in a fluid phase.

Steiro was cited as teaching the making of concrete pipe using a longitudinal opening. However, this is used in an outer mould part, not a core, the process involves producing concrete pipes in a horizontal mold, and the opening is used to fill the mold space with concrete.

While a longitudinal opening may be known generally, to render obvious the claimed invention, the opening must be part of the applicator associated with the core, and used to deliver a further material.

In conducting an obviousness analysis, "[a] fact finder should be aware . . . of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning." *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742, 167 L. Ed. 2d 705 (2007). This is because the genius of invention is often a combination of known elements that in hindsight seems preordained. In *re Omeprazole Patent Litig.*, No. MDL 1291, 490 F. Supp. 2d 381, 2007 U.S. Dist. LEXIS 39670, at *400-01 (S.D.N.Y. May 31, 2007) (citation omitted) (quoting *KSR*, 127 S.Ct at 1742); see also *Interconnect Planning Corp. v. Feil*, 774 F.2d

1132, 1138 (Fed. Cir. 1985), *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 961 (Fed. Cir. 1983) (stating that "virtually every claimed invention is a combination of old elements").

"It is not within the framework of 35 U.S.C. Section 103 to pick and choose from the prior art only so much as will support a holding of obviousness to the exclusion of other parts necessary for a full appreciation of what the prior art teaches or suggests, as hindsight is not the test. *In re Wesslau*, 353 F.2d 238 (CCPA 1965). The Examiner "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2D (BNA) 1596 (Fed. Cir. 1988).

The examiner must guard against reliance on "hindsight", best explained as follows:

The genius of invention is often a combination of known elements which in hindsight seems preordained. To prevent hindsight invalidation of patent claims, the law requires some "teaching, suggestion or reason" to combine cited references. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 U.S.P.Q.2D (BNA) 1378, 1383 (Fed. Cir. 1997). When the art in question is relatively simple, as is the case here, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. See *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2D (BNA) 1614, 1617 (Fed. Cir. 1999), limited on other grounds by *In re Gartside*, 203 F.3d 1305, 53 U.S.P.Q.2D (BNA) 1769 (2000) (guarding against falling victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher). *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351, 60 U.S.P.Q.2D (BNA) 1001, 1008 (Fed. Cir. 2001).

Moreover, to support a conclusion that a claim would have been obvious, it must be established that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. KSR, at 416-417.

In reviewing the patents cited by the examiner, it is clear that the rejection is based on a hindsight reconstruction, and even then, the combination is lacking. To combine Steiro with the Kern, one must ignore the differences in location, function as well as outcome when trying to fit the longitudinal opening into Kern. Consequently, the combination is improper and the rejection should be withdrawn.

Claims 16-18 and 24 were rejected as being unpatentable over Kern, in view of Steiro and further in view of Hutchinson, U.S. Patent no. 2,356,852.

Hutchinson was cited as disclosing the use of vibration, however, this is not associated with promoting application and firm bonding of a liner having a greater density structural surface to a concrete pipe as the concrete is filled into a space in a mould, and this cannot be combined with Kerns and Steiro, as Kerns would not permit the resin application until the concrete is nearly set and firmly compacted, and so the combination does not lead one to the applicants' invention.

Based on the above amendments and remarks, favorable consideration and allowance of the application are respectfully requested. However should the examiner believe that direct contact with the applicant's attorney would advance the prosecution of the application, the examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,

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